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Nota di contenuto	Preface -- 1. Causes and Effects of Pesticide and Metal Pollution on Different Ecosystems -- 2. Ecotoxicology of Heavy Metals: Sources,

Effects and Toxicity -- 3. Role of Modern Innovative Techniques for Assessing and Monitoring Heavy Metal and Pesticide Pollution in Different Environments -- 4. Global Scenario of Remediation Techniques to Combat Pesticide Pollution -- 5. Mycoremediation: A Sustainable Approach for Pesticide Pollution Abatement -- 6. Bio-pesticides: Application and Possible Mechanism of Action -- 7. Values of Biofertilizers for Sustainable Management in Agricultural Industries -- 8. Role of Macrophytes in Spontaneous Lacustrine Phytofiltration -- 9. Phytoremediation of Heavy Metals Using Salix (Willows) -- 10. Photocatalysis: An Effective Tool for Treatment of Dyes Contaminated Wastewater -- 11. Removal of dyes from waste water by Micellar Enhanced Ultrafiltration -- 12. Biofilm: an innovative modern technology for aquatic pollution remediation -- 13. Heavy Metal Soil Contamination and Bioremediation -- 14. Environmental Biotechnology: For Sustainable Future -- 15. Global Environmental Regulations for Management of Pesticides -- Index.

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### Sommario/riassunto

This book addresses the grave concerns stemming out due to conventional treatment techniques. The main focus of this book revolves round the central kernel of novel technology (bioremediation and biotechnology) which has emerged as an independent warrior to clean up and restore the disturbed environs. Furthermore, this book is a coherent assortment of diverse chapters relevant to the role of biotechnology and bioremediation for restoration of the ecosystems degraded by pesticide and heavy metal pollution. The inaugural chapters deal with the quantification of problem and its magnitude due to pesticides and heavy metals, followed by innovative modern biotechnological and bioremediation treatment technologies and sustainable techniques to remediate the persistent pollutants. It is a detailed comprehensive account for the treatment technologies from unsustainable to sustainable. Academicians, researchers and students shall find it as a complete wrap up regarding biotechnological intervention for sustainable treatment of pollution and shall suffice for the diverse needs of teaching and research.

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